

Title Organic fruit production in Europe: successes in production and marketing in the last decade, perspectives and challenges for the future development

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Abstract

The organic market has grown exponentially in Europe during the last ten years. However, the organic fruit industry in European states still has a relatively low market share of less than 1-5% compared with organic vegetables, milk and eggs that have achieved market shares of close to 10% of the total market. As well, conventional fruit growers still hesitate to respond to the generally good organic market demand. A major reason for this behaviour is the continuing high production risk due to less availability of effective management tools for the control of pests, diseases, weed and biennial bearing. The key pests and diseases in apple and pear include scab, sooty blotch, and fire blight as well as rosy apple aphid, pear sucker and codling moth, as well as post-harvest diseases like *Gloeosporium* rot. Another reason that holds up organic fruit expansion is that in fruit production, in contrast to milk or wheat, new and organic-specific marketing attempts are necessary for organic cultivars, less cosmetic “beauty”, etc.) but are presently scarce. In an ideal organic production system, all possible measures that lead to improved stability and self-regulation of the agro-ecological system have to be implemented (e.g. resistant cultivars, bio-diversity areas, lower planting densities, measures to avoid inoculum build-up, soil fertility). At present, most organic orchards have almost the same design as found in conventional production and often do not include system stabilising elements. Therefore, organic fruit production still depends largely on direct pest and disease control methods. In the last decade effective compounds and techniques have been developed such as Neem preparations, granulosis viruses, and mating disruption to control pests. Some new plant protection techniques e.g. clay powders, resistance inducers, better spray technique and spray timing models have been introduced. The introduction of new equipment, compounds, cultivars and decision support systems will further improve yield stability. However, for other limiting factors, such as weed competition, crop load regulation and market demands in respect to quality, innovative solutions have to be developed. The challenge for the future is to build up a credible (“true-organic”) and high quality multi-factor oriented organic fruit production that combines single factor solutions to a self-regulating, and possibly even organic pesticide-free, production system. Progress in this direction will lead to innovative organic production and marketing concepts that are clearly different from conventional ones. To achieve these goals, creative efforts along the whole chain involving producers, consumers, retailers, advisory services and researchers are essential.